CHICKALOON
HEALTH CLINIC

Alaska Rural Primary Care Facility
Code and Condition Survey

April 23, 2003

Southcentral Foundation

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I. Executive Summary

Overview:

The Chickaloon Health Clinic is currently a 534 SF clinic located inside of the Tribal Multi-use facility. The facility contains a large community hall, tribal offices, Alcohol Program room, TFYS, and ICWA program rooms. The overall facility is an old church building with additions for vestibules and entries, mechanical rooms and other minor renovations. The overall building was recently renovated to the Tribal building. The Clinic renovation was underway in a small portion of the lower floor on the day of our inspection. The building appears to have been constructed in the last 15-20 years. The clinic has no waiting room other than a small reception for the entire tribal areas, hallway space, front office shared area, one exam room, one storage/medical supply/pharmacy, one shared toilet, mechanical room is central to the entire building. The concrete basement and wood frame construction standard is a conventional structure but poorly insulated. It does not meet the standards of current codes and construction. The clinic portion is very small and the current village population is listed as 217 total. The Village is located on the main highway so medical services are available in Palmer, and Anchorage, but with substantial transportation costs.

Renovation/Upgrade and Addition:

The Clinic would require a 1466 SF addition to accommodate the current need and Alaska Rural Primary Care Facility space guidelines. This addition is not possible on the existing site or with the building. The addition would require considerable additional grade work, filling and combining with adjacent property. There are sites available to the village and one is in process of acquisition to accommodate the new clinic and other tribal organizations. As can be seen from the documentation enclosed, the existing clinic will require some renovation to meet current code and standards as well. The cost of renovation and addition will exceed the cost of a new clinic facility.

New Clinic:

The community has proposed that a new larger 2000 SF Denali Commission Medium Clinic can be constructed on a new site, just a half mile from the existing clinic. We have included a preliminary site plan chosen by the village council and under contract for acquisition.

The site has existing city utilities available and can be served easily. The Tribal Administrator, Nick Begich, has confirmed the chosen site and will have all documentation completed in the next couple months.

The community has completely supported this effort and have met extensively to assist in new site issues and to resolve any site considerations of the three options presented.

II. General Information

A. The Purpose of the Report and Assessment Process:

ANTHC has entered into a cooperative agreement with the Denali Commission to provide management of the small clinic program under the Alaska Rural Primary Care Facility assessment, planning, design and construction. Over 200 clinics will be inspected through the course of the program. The purpose of the Code and Condition survey report is to validate the data provided by the community in the Alaska Rural Primary Care Facility Needs Assessment and to provide each community with a uniform standard of evaluation for comparison with other communities to determine the relative need between the communities of Alaska for funding assistance for the construction of new or remodeled clinic facilities. The information provided in this report is one component of the scoring for the small clinic RFP that the Denali Commission sent to communities in priority Groups 3 and 4. The information gathered will be tabulated and analyzed according to a set of fixed criteria that should yield a priority list for funding. Additionally, the relative costs of new construction vs. remodel/addition will be evaluated to determine the most efficient means to bring the clinics up to a uniform standard of program and construction quality.

A team of professional Architects and Engineers traveled to the site and completed a detailed Field Report that was reviewed by all parties. Subsequently, the team completed a draft and then final report of the facility condition.

B. Assessment Team:

Gary Kuhn P.E., ANTHC organized the assessment team. The team for this site visit was Gerald L. (Jerry) Winchester, Architect, Winchester Alaska, Inc.; Bob Jernstrom, PE, Jernstrom Engineering; and Gary Kuhn P.E., ANTHC. Team members who assisted in preparation of report from information gathered included members of the field team above and Ben Oien PE, Structural Engineer; Tom Humphrey, PE, Electrical Engineer; Carl Bassler PE, Civil Engineer; and Estimation Inc.
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C. Report Format:

The format adopted is a modified “Deep Look” format, a facilities investigation and condition report used by both ANTHC and the Public Health Service, in maintaining an ongoing database of facilities throughout the country. Facilities are evaluated with respect to the requirements of the governing building codes and design guidelines. Building code compliance, general facility condition, and program needs have been evaluated. The written report includes a floor plan of the clinic, site plan as available, and new plans for renovation/upgrade or completely new clinics. Additional information was gathered during the field visit which includes a detailed Field Report and building condition checklist, sketches of building construction details, investigations of potential sites for new or replacement clinics, and proposed plans for village utility upgrades. This information is available for viewing at ANTHC’s Anchorage offices and will be held for reference.

D. The Site Investigation:

On January 29, 2002 the team drove to the site and made observations, took photos, and discussed the needs with on-site personnel for the facility. Approximately three-four hours was spent on site, with sufficient time to investigate foundations, structure, condition, mechanical and electrical systems, and to interview the staff to assess current and projected health care needs.

Interviews were conducted with the Nick Begich, Tribal Government Administrator. The staff provided information on the existing building, site, and utilities. Claudia A. Palacios, Health was also interviewed regarding the existing clinic. These interviews provided clear understanding of the needs of the village, the clinic facility, and the users of the facility.

The Chickaloon Tribal Government and staff have reviewed the use of a Denali Commission Medium Health Clinic design adapted to the new Chickaloon Site. He has agreed to proceed with final approvals of the site.

III. Clinic Inspection Summary

A. Community Information:

Population: 213 (2000 Census)
Unincorporated, Matanuska-Susitna Borough, Matanuska-Susitna School District, Cook Inlet Region Native Incorporation.

Location:
Chickaloon is located on the Chickaloon River, at Milepost 76 on the Glenn Highway, 26 miles northeast of Palmer in the Talkeetna Mountains. It lies at approximately 61d 47m N Latitude, 148d 28m W Longitude. (Sec. 25, T020N, R005E, Seward Meridian.) Chickaloon is located in the Palmer Recording District. The area encompasses 79.4 sq. miles of land and .8 sq. miles of water. The temperatures in January range from 6 to 14 inches; in July, 47 to 67. Annual precipitation is 16.5 inches.

History:
Athabascans have occupied this territory for centuries. The Chickaloon River was named after Chief Chiklu. A non-Native settlement was established in the area around 1916 when the Naval Coal Reserve was mined. It was the terminus of the Matanuska Branch of the Alaska Railroad

Culture:
Chickaloon is comprised of two settlements -- Chickaloon Native Village and the non-Native area represented by the Chickaloon Community Council. Residents are extremely proactive regarding subsistence and sovereignty issues.

Economy:
Local retail businesses - a motel/lodge, gas station, store and post office - provide the majority of employment. Some individuals work in the Palmer/Wasilla area. Subsistence is an important activity for both Native and non-Native residents. One resident holds a commercial fishing permit. There is high local interest in agricultural activities.

Facilities:
Approximately 75% of households have individual water wells and septic tank systems; most homes are plumbed. Chickaloon residents are concerned about the affects of development of the Wishbone Hill coal mine on the area's water resources.

Transportation:

Chickaloon is accessible by the statewide highway system. Goods are most often brought in from the Palmer/Wasilla area or Anchorage. A private airstrip is nearby at Jonesville Mine.

Climate:

The temperatures in January range from 6 to 14 inches; in July, 47 to 67. Annual precipitation is 16.5 inches.

B. General Clinic Information:

Physical Plant Information:

The existing Chickaloon Health Clinic building is a 20-30 year old multi-use building originally built as a church. It was purchased by Chickaloon Village Tribal Council and subsequently remodeled into a community building, and tribal offices. In January of 2002 a clinic exam room was being constructed to begin primary care on in the community rather than transporting all patients to Palmer or Anchorage. (See attached Plan) It is one of the smaller size clinics provided during the last twenty years in the program area. It has very small multi-use waiting room, one exam room, one shared toilet, and a small storage room. It has a front entry with no vestibule and does not allow stretcher access. There is no rear entry. The clinic is served with water and sewer from the on-site well and septic. A sink is provided in the exam room and in the toilet/bathroom. The facility is totally inadequate, small corridors, and cramped spaces.

Clinic program usage information:

We do not have the patient records that indicate clinic usage and are available from the Chickaloon Tribal Health Director. There are four full time health aides currently providing home care services and will be providing services in the one exam room clinic. The office space provided is entirely inadequate as it has all office functions, travel, files, and use by all health aides. The room contains a desk, copier, fax, and two chairs and other equipment and supplies.

Community Program Sheet:

The community program sheet P1.0 Services has been included if available on the next page. These sheets were completed during the Code and Condition Survey by ANTHC representative.

C. Program Deficiency Narrative:

1. Space Requirements and Deficiencies:

Space Comparison Matrix - Current Chickaloon Actual SF to Denali Commission Medium Clinic

Alaska Rural Primary Care Facility

Purpose / Activity	Current Clinic Actual Net SF			Medium clinic ARPCF SF			Difference		
		No.	Net Area (SF)	Size	No.	Net Area (SF)	Size	No.	Net Area (SF)
Arctic Entries			0	50	2	100			100
Waiting/Recep/Closet			0	150	1	150			150
Trauma/Telemed/Exam			0	200	1	200			200
Office/Exam	95	1	95	150	1	150			55
Admin./Records	109	1	109	110	1	110			1
Pharmacy/Lab			0	80	1	80			80
Portable X-ray			0			0			0
Specialty Clinic/Health Ed/Conf	111	1	111	150	1	150			39
Patient Holding/ Sleeping Room			0	80	1	80			80
Storage			0	100	1	100			100
HC Toilet	41	1	41	60	2	120			79
Janitor's Closet			0	30	1	30			30
Subtotal Net Area			356			1270			914
Circulation & Net/Gross Conv. @ 45%			154			572			418
Subtotal (GSF)			510			1842			1332
Mechanical Space @ 8%			24			147			123
Total Heated Space			534			1989			1455
Morgue (unheated enclosed space)				30	1	30			30
Ext. Ramps, Stairs, Loading	As Required			As Required			As Required		

a. Overall space deficiencies: The size of the facility is about 1466 sf short of the ARPCF space requirements based on the 2000 SF nominal clinic size.

b. Specific room deficiencies: There are no vestibules, small multi-use waiting space, minimal office and storage space, no TDY, no trauma room. This in combination with other small spaces leaves the clinic very program deficient.

c. Other size issues: Mechanical room is shared, and there are no unheated or exterior storage areas, and circulation is narrow and very difficult.

2. Building Issues:

a. Arctic Entries - The main entry in not accessible for ADA and is impossible to get a gurney into the room. It has storage of needed materials that cannot be stored inside the facility due to lack of room.

b. Waiting / Reception –The waiting area contains one chair and has equipment and other items stored in the room.

c. Trauma/Telemed/Exam – There is a no trauma room and the one exam room does not meet all aspects or requirements. There is only one room that is used for exam or some combination.

d. Office / Exam – There is one exam room, and there was no capability of putting a patient in a gurney in the exam room. There is a sink in the room and sanitation for patients is an issue. Privacy is very difficult. Note that electrical service is completely inadequate for the needs of the equipment.

e. Administration / Records – There is no office room space used for all administrative, records, scheduling, and other functions. It is very small.

f. Pharmacy / Lab – There is not a Pharmacy and medicines are stored in locked cabinets in the exam room.

g. Specialty Clinic / Health Education / Conference - This function is completed in the exam room generally. There is a traditional healing room and behavioral health room that are used for non-medical functions in the current facility. There is no space for health educations or conferencing for clinical health care at this time.

h. Patient Holding / Sleeping Room – There is no sleeping room and a rollaway bed for itinerant staff. The exiting does not meet code with window egress.

i. Storage – Storage is inadequate and is an impediment to safety and the operation of this clinic. There is a lack of adequate storage for needed medical supplies, files, and equipment in this facility. There is minimal storage and mostly it is in the exam rooms. There is storage in all the rooms.

j. HC Toilet Facilities – There are shared toilet facilities which do not meet most ADA requirements or current codes.

k. Janitors Room – There is no janitor's room as required by code.

l. Mechanical/Boiler room – There is a shared mechanical room

m. Ancillary Rooms – There are no ancillary rooms as all space is used to maximum capacity including exam rooms, office, waiting room, corridors, and vestibules.

3. Functional Design Issues

This facility is functionally poorly laid out and not completely functional for its intended use. The spaces do not meet the functional size requirement, access is non-compliant, and the ability to perform required medical functions within the facility is severely hampered by lack of storage.

4. Health Program Issues

    a. Vestibule and comfort:
    The front door of the clinic no vestibule, which is inadequate to defer the heat loss. There is no ADA access or proper gurney access. The exam rooms are cold every time the door is opened and the cold air migrates into the clinic where patients are being attended.

    b. Medical/Infectious Waste
    This is being handled in a very basic method and is hampered by the small non-functional facility.

    c. Infection Control
    This is being completed with minimal long-term control due to lack of facilities. Floor materials are carpet and do not meet infection control standards for exam spaces.

    d. Insect and Rodent Control
    None noted or investigated

    e. Housekeeping
    The difficulty in cleaning and housekeeping in such a congested facility is understandable and is being done at the best level currently possible.

5. Utilities
    a. Water Supply
    Water is supplied by on-site water system.

    b. Sewage Disposal
    Sewer is supplied by on-site sewer system

    c. Electricity
    See Electrical Narrative.

    d. Telephone
    A single phone line services the clinic and is inadequate for current needs.

    e. Fuel Oil
    The fuel system is not adequate with some leaking having occurred around the existing above ground tank. There is not protection or containment for possible spilling.

D. Architectural / Structural Condition

1. Building Construction:

    a. Floor Construction:
    The floor is slab on grade concrete on the first floor with 2x12 joists on the second floor. The foundation is concrete footing. There is no insulation in the floor system.

b. Exterior Wall Construction:
The walls concrete on the first floor with exterior applied urethane foam insulation and protective coating. The upper walls are 2x6 construction there appears to be fiberglass batt insulation with vapor barrier and gypsum board on the interior. The exterior siding is T111 plywood and painted.

c. Roof Construction:
The roof is 2x6 trusses at 24" oc with composition shingles. There is roof shear plywood, however, ventilation is minimal. The insulation is R-24-38 batt insulation that is minimal in this climate and required upgrading to R-60.

d. Exterior Doors:
The exterior doors are residential metal and in adequate shape and will not withstand the use required. They need replacement.

e. Exterior Windows:
Windows are thermo-pane windows; and in adequate shape.

f. Exterior Decks, Stairs, and Ramps
There is only one entry on the front. It is at grade, but there are threshold problems that need corrections to allow for full ADA access. The upper level is served with an ADA approved ramp and stair. The ramp is uncovered and therefore limited by adversity and affected by weather conditions.

2. Interior Construction:

a. Flooring:
The flooring is carpet in the exam room and sheet vinyl in the toilet room. It needs complete replacement for clean ability and infection control issue.

b. Walls:
The walls are of 2x4 wood construction, with no sound insulation. The type of wall construction does not provide for patient privacy in any way.

c. Ceilings:
The ceilings are gypboard over the ceiling joists. Sound isolation will be required.

d. Interior doors:
The interior walls are of hollow core wood construction and none of the hardware meets ADA requirements. These do not meet the standards for privacy and durability for clinics. The must all be replaced.

e. Casework:
The upper casework and lower casework are of OK construction. The sanitary issues are significant with the counters and cracks to the walls in most rooms.

f. Furnishings:
The furnishings are all in OK condition. There is one chair in the waiting room and a variety of desks, chairs, and tables for other use. The exam tables are OK.

g. Insulation:

Floor Insulation		R-0
Wall Insulation	R-11	
Attic/Roof Insulation		R-24-30
Attic Ventilation		NONE

h. Tightness of Construction:
The building is of general adequate overall construction. The building has numerous leaks in construction system at doors, floor, roof, and sills as well as the walls.

i. Arctic Design:
The vestibules are non-existent, orientation is OK, and siting of the clinic is not good since it sets lower than the road in front and has drainage problems.

3. Structural

a. Foundations
The foundation is concrete on grade with gravel pad and is in adequate structural condition.

b. Walls and Roof:
The walls and roof are adequate.

c. Stairs. Landings, and Ramps
These elements meet current code.

E. Mechanical Condition

1. Heating System

It should be noted that the clinic is not operational at the time of the site visit. The clinic exam room is currently under construction.

a. Fuel Storage and Distribution
The clinic's heating fuel oil storage tank is located adjacent to the property line and not a minimum of 10 ft. as required by code. The 550-gallon storage tank does not have the proper venting, piping, or valving as required by code.

b. Furnace
A single residential grade, oil-fired furnace provides heating for the entire clinic. The furnace is in good condition to meet the heating needs of the Health Clinic. There is no combustion air openings for the furnace which is against code. There are no additional heaters in the clinic to assist with heating. A large number of boxes, parts, equipment, etc. are stored in the furnace room making access for inspections, maintenance, and repair difficult.

c. Heat Distribution System
The furnace supply air duct distribution system is routed through the second floor joists space. The return air makes its way back to the furnace through the corridor. The supply air diffusers are located in the ceiling.

2. Ventilation System
    a. System
    There is no mechanical ventilation system. Ventilation is by operable windows. The windows do not open easily and as such do not provide effective ventilation. The clinic office does not have an operable window and as such has no ventilation.

    b. Exhaust Air
    A ceiling mounted exhaust fan services the toilet room. This fan is ducted outside. The kitchen range is not provided with a code required range hood and exhaust fan.

3. Plumbing System
    a. Water System
    The water system plumbing is typical ½" and ¾" copper distribution piping to the clinic exam sinks and toilet fixtures. A well provides the water needs of the clinic.

    b. Sewer System
    A septic tank and drain field system provides the sewer needs of the clinic.

    c. Fixtures
    The toilet room plumbing fixtures are ADA approved or UPC code compliant for barrier free access (except the lavatory). The exam room does not have a sink for washing hands and for other sanitation requirements as required by code.

    d. Water Heater
    The electric water heater is installed in a storage room. Access to the water heater is limited.

F. Electrical Condition

Chickaloon was in the process of converting a couple rooms in an newer building for use as a temporary health clinic. Only a cursory inspection was done since this occupancy was unsuitable for any longer term use

1. Electrical Service
    a. Electrical service is 120/240V overhead service. The main building disconnect switch was blocked by the handicap ramp which is violation of the NEC Article 230.7.0(A)1 and 404.8(A) and 110.26(A)

2. Power Distribution
    a. The wiring in the building was observed incomplete in several places.

    b. Non-metallic sheathed cable (Romex) is used for the branch circuit wiring. Patient care areas need to be wired in metal raceways. NEC 517-13(a) and (b).

3. Grounding System
    Grounding of Electrical Systems
    a. Grounding was not verified

    Grounding of Electrical Equipment
    b. Equipment grounding was not verified.

4. Exterior Elements
    a. Exterior lighting does not appear to be adequate to meet ADA standards on their long handicapped ramp.

    b. No exterior power receptacles were noted.

5. Wiring devices
    a. Receptacles are residential type, not hospital grade. NEC 517-81(b).

6. Lighting
    a. Foot candle measurements were taken and lighting levels are generally not adequate. The Exam room measured below 50FC and should be at least 75FC. Other areas were all pretty dim.

    b. The lighting is predominately 1x4 ft fluorescent T12 (2) lamp surface troffers. The fixtures are new; replace lamps and ballasts with 32 watt T8 lamps with electronic ballasts.

    c. Interior device plates are non-metallic ivory decorative plates.

7. Emergency System
    a. Building does not appear to utilize battery backed emergency type exit signs. UBC 1003.2.8.

    b. The building does not appear to have any emergency lights. UBC 1003.2.8.

8. Fire Alarm System
    a. The building does not appear to have any fire alarm system. ADA 4.28 and UBC 1105.4.5. Existing fire/smoke detectors were disabled.

9. Telecommunication
    a. Provisions for telephone wiring are minimal.

    b. Not Cat 5e or 6 wiring provisions were apparent but some LAN equipment exists. An adequate analysis was not performed.

10. Energy Management
    a. Rooms should have occupancy sensor switches installed.

G. Civil / Utility Condition

1. Location of building
    a. Patient Access
    Located in the relative center of the village for ease of access and seems to work fine. It is on the main road to the highway which is an advantage.

    b. Service Access

Road access is provided to front. The entry does not meet ADA code access requirements. There are thresholds and steps that make access impossible without correction.

c. Other Considerations:
The facility is located in the center of town and allows for minimal expansion.

2. Site Issues
   a. Drainage
   Drainage from the site is adequate although it is partial basement facility.

   b. Snow
   There does not appear to be an apparent snow-drifting problem as the facility sits in the open although winds in the Matanuska River drainage indicate snow drifting could be a problematic. The new clinic design should accommodate a drift analysis.

3. Proximity of adjacent buildings
   There is not adequate space for any expansion on the current site.

4. Utilities
   a. Water Supply
   The water supply is on-site well system.

   b. Sewage Disposal
   Sewage disposal is on-site septic system.

   c. Electricity
   Power from Village system via overhead lines are maintained by Matanuska Electric Association. See Photos

   d. Telephone
   Overhead phone with only one phone connection, requiring fax and phone on same line.

H. Existing Facility Floor Plan (Site Plans, New Clinic Plans, Regional Map):

We have attached drawings, as we have been able to identify, find, or create as part of this report. We have endeavored to provide all drawings for all the sites; however, in some cases exact existing site plans were not available. We have provided as indicated below:

A1.1 Existing Site Plan is attached if available

A1.2 Existing Facility Floor Plan is attached following.

A1.3 The Existing typical wall section is attached following as required by the report guidelines.

A2.1 The Addition to the Existing Facility as required to meet ARPCF Space Guidelines is attached following.

A3.1 There has not been an new site selected.

A3.2 The New Denali Commission Clinic Floor Plan meeting the ARPCF Space Guidelines and proposed for this location is attached.

IV. Deficiency Evaluation

A. Deficiency Codes:

The deficiencies are categorized according to the following deficiency codes to allow the work to be prioritized for funding. The codes are as follows:

01 Patient Care: Based on assessment of the facilities ability to support the stated services that are required to be provided at the site. Items required for the patients social environment such as storage, privacy, sensitivity to age or developmental levels, clinical needs, public telephones and furnishings for patient privacy and comfort.

02 Fire and Life Safety: These deficiencies identify areas where the facility is not constructed or maintained in compliance with provisions of the state mandated life safety aspects of building codes including the Uniform Building Code, International Building Code, The Uniform Fire Code, NFPA 101, The Uniform Mechanical and Plumbing Codes and The National Electrical Code. Deficiencies could include inadequacies in fire barriers, smoke barriers, capacity and means of egress, door ratings, safe harbor, and fire protection equipment not covered in other deficiency codes.

03 General Safety: These deficiencies identify miscellaneous safety issues. These are items that are not necessarily code items but are conditions that are considered un-safe by common design and building practices. Corrective actions required from lack of established health care industry safety practices, and local governing body code safety requirements. I.e. Occupational Safety Health Administration (OSHA) codes & standards.

04 Environmental Quality: Deficiencies based on Federal, State and Local environmental laws and regulations and industry acceptable practices. For example this addresses DEC regulations, hazardous materials and general sanitation.

05 Program Deficiencies: These are deficiencies that show up as variations from space guidelines evaluated through industry practices and observation at the facility site and documented in the facility floor plans. These are items that are required for the delivery of medical services model currently accepted for rural Alaska. This may include space modification requirements, workflow pattern improvements, functional needs, modification or re-alignment of existing space or other items to meet the delivery of quality medical services. (Account for new space additions in DC 06 below)

06 Unmet Supportable Space Needs: These are items that are required to meet the program delivery of the clinic and may not be shown or delineated in the Alaska Primary Care Facility Space Guideline. Program modifications requiring

additional supportable space directly related to an expanded program, personnel or equipment shall be identified in this section; for example additional dental space, specialty clinic, storage, or program support space that requires additional space beyond the established program.

07 Disability Access Deficiencies: The items with this category listing are not in compliance with the Americans with Disabilities Act. This could include non-compliance with accessibility in parking, entrances, toilets, drinking fountains, elevators, telephones, fire alarm, egress and exit access ways, etc.

08 Energy Management: These deficiencies address the efficiency of lighting, heating systems/fuel types and the thermal enclosures of buildings, processes, and are required for energy conservation and good energy management.

09 Plant Management: This category is for items that are required for easy and cost efficient operational and facilities management and maintenance tasks of the physical plant.

10 Architectural M&R: Items affecting the architectural integrity of the facility, materials used, insulation, vapor retarder, attic and crawlspace ventilation, general condition of interiors, and prevention of deterioration of structure and systems.

11 Structural Deficiencies: These are deficiencies with the fabric of the building. It may include the foundations, the roof or wall structure, the materials used, the insulation and vapor retarders, the attic or crawl space ventilation and the general condition of interior finishes. Foundation systems are included in this category.

12 Mechanical Deficiencies: These are deficiencies in the plumbing, heating, ventilating, air conditioning, or medical air systems, interior mechanical utilities, requiring maintenance due to normal wear and tear that would result in system failure.

13 Electrical Deficiencies: These are deficiencies with normal or emergency power, electrical generating and distribution systems, interior electrical and communications utilities, fire alarm systems, power systems and communications systems within a building that should be repaired or replaced on a recurring basis due to normal wear and tear that would otherwise result in system failure.

14 Utilities M&R: This category is used for site utilities for incoming services to facilities that are required for the building to be fully operational. Deficiencies may include sewer and water lines, water wells, water tanks, natural gas and propane storage, electric power and telecommunications distribution, etc.

15 Grounds M&R: Real property grounds components that should be replaced on a recurring basis due to normal wear and tear. Deficiencies with respect to trees, sod, soil erosion, lawn sprinklers, parking, bridges, pedestrian crossings, fences, sidewalks & roadways, and site illumination etc. are considerations.

16 Painting M&R: Any painting project that is large enough to require outside contractors or coordination with other programs.

17 Roof M&R: Deficiencies in roofing, and related systems including openings and drainage.

18 Seismic Mitigation: Deficiencies in seismic structural items or other related issues to seismic design, including material improperly anchored to withstand current seismic requirements effect. The elements under consideration should include the cost incidental to the structural work like architectural and finishes demolition and repairs.

B. Photographs:

We have provided photographs attached which are noted to describe the various deficiencies described in the narratives and itemized in the summary below. The photos do not cover all deficiencies and are intended to provide a visual reference to persons viewing the report who are not familiar with the facility.

We have included additional photos as Appendix B for general reference. These are intended to add additional information to the specific deficiencies listed and to provide general background information.

C. Cost Estimate General Provisions

1. New Clinic Construction

a. Base Cost: The Base Cost provided in Section VI of this report is the direct cost of construction, inclusive of general requirements (described below) and contingency for design unknowns (an estimating contingency). The base cost is exclusive of overhead and profit, mark-ups, area cost factors and contingencies. Material costs for the project are all calculated FOB Anchorage and labor rates are based on Davis Bacon wages, regionally adjusted to Anchorage. Transportation costs, freight, Per Diem and similar costs are included in the base costs. The Project Factors and Area Cost Factor are multipliers of the base costs.

- General Requirements are based on Anchorage costs without area adjustment. It is included in the Base Cost for New Clinics. These costs are indirect construction cost not specifically identifiable to individual line items. It consists of supervision, materials control, submittals and coordination, etc. The general requirements factor has not been adjusted for Indian Preference.
- The Design Unknowns Contingency is an estimator's contingency based on the schematic nature of the information provided, the lack of any real design, and the assumption that any project will encompass related work not specifically mentioned.

b. Project Cost Factors

- Equipment Costs for new medical equipment has been added at 17% of the cost of new floor space.
- Design Services is included at 10% to cover professional services including engineering and design.
- Construction Contingency is included at 10% of the Base Costs to cover changes encountered during construction.
- Construction Administration has been included at 8% of the Base Costs. This is for monitoring and administration of the construction contract.

c. Area Cost Factor: The Area Cost Factor used in the cost estimates for this facility is shown in Section VI of this report. The area cost factors are taken from a recent study completed for the Denali Commission for statewide healthcare facilities. The numbers are the result of a matrix of cost variables including such items as air travel, local hire costs, room and board, freight, fire protection equipment, foundation requirements, and heating equipment as well as contractor costs such as mobilization, demobilization, overhead, profit, bonds and insurance. These parameters were reconsidered for each village, following the site visit, and were modified, if necessary.

d. Estimated Total Project Cost of New Building: This is the total estimated cost of the project, including design services. The construction contract will be work subject to Davis Bacon wages, and assumes construction before year-end 2001. No inflation factor has been applied to this data.

2. Remodel, Renovations, and Additions

a. Base Cost: The Base Cost provided in the specific deficiency sheets is the direct cost of construction, exclusive of overhead and profit, mark-ups, area cost factors and contingencies. Material costs for the project are all calculated FOB Anchorage and labor rates are based on Davis

Bacon wages, regionally adjusted to Anchorage. Most of the deficiency items do not constitute projects of sufficient size to obtain efficiency of scale. The estimate assumes that the projects are completed either individually, or combined with other similar projects of like scope. The numbers include moderate allowances for difficulties encountered in working in occupied spaces and are based on remodeling rather than on new construction costs. Transportation costs, freight, Per Diem and similar costs are included in the base costs. The General Requirements, Design Contingency and Area Cost Factors are multipliers of the base costs.

- The cost of Additions to clinics is estimated at a unit cost higher than new clinics due to the complexities of tying into the existing structures.
- Medical equipment is calculated at flat rate of approximately $32 which is the same amount as used for Equipment for New Clinic Construction. It is included as a line item in the estimate of base costs.

b. General Requirements Factor: General Requirements Factor is based on Anchorage costs without area adjustment. The factor is 1.20. It is multiplied by the Base Cost to get the project cost, exclusive of planning, architecture, engineering and administrative costs. This factor assumes projects include multiple deficiencies, which are then consolidated into single projects for economies of scale. The general requirements factor has not been adjusted for Indian Preference.

c. Area Cost Factor: The Area Cost Factor used in the cost estimates for this facility is shown in Section VI of this report. The area cost factors are taken from a recent study completed for the Denali Commission for statewide healthcare facilities. The numbers are the result of a matrix of cost variables including such items as air travel, local hire costs, room and board, freight, fire protection equipment, foundation requirements, and heating equipment as well as contractor costs such as mobilization, demobilization, overhead, profit, bonds and insurance. These parameters were reconsidered for each village, following the site visit, and were modified, if necessary.

d. Contingency for Design Unknowns (Estimating Contingency): The Design Unknowns Contingency is an estimator's contingency based on the schematic nature of the information provided, the lack of any real design, and the assumption that any project will encompass related work not specifically mentioned. The factor used is 1.15.

e. Estimated Total Cost: This is the total estimated bid cost for work completed under Davis Bacon wage contracts, assuming construction before year-end 2001. This is the number that is entered in the front of the deficiency form. No inflation factor has been applied to this data.

f. Project Cost Factors: Similar to new clinics, the following project factors have been included in Section VI of this report.

- Design Services is included at 10% to cover professional services including engineering and design.
- Construction Contingency is included at 10% of the Base Costs to cover changes encountered during construction.
- Construction Administration has been included at 8% of the Base Costs. This is for monitoring and administration of the construction contract.

g. Estimated Total Project Cost of Remodel/Addition: This is the total estimated cost of the project including design services, the construction contract cost for work completed under Davis Bacon

wages and assuming construction before year-end 2001. No inflation factor has been applied to this data.

V. Summary of Existing Clinic Deficiencies

The attached sheets document the deficiencies; provide recommendations on how to make repairs or accommodate the needs and provide a cost estimate to accomplish the proposed modifications. The summary addresses individual deficiencies. If all deficiencies were to be addressed in a single construction project there would be cost efficiencies that are not reflected in this tabulation.

These sheets are reports from the Access Data Base of individual Deficiencies that are compiled on individual forms and attached for reference.

Refer to Section VI. New Clinic Analysis for a comparison of remodel/addition to new construction.

VI. New Clinic Analysis

The analysis of whether a new clinic is required is based on the Denali Commission standard of evaluation that "New Construction is viable if the cost of Repair/Renovation and Addition exceeds 75% of the cost of New Construction".

We have therefore determined the cost of a New Clinic Construction to meet the Alaska Rural Primary Care Facility (ARPCF) Space Guidelines for the size of village. We have also determined the cost to Repair/Renovation and Addition to the existing Clinic to meet the same ARPCF Space Guidelines.

A. The cost of a New Denali Commission 2000 SF Small Clinic in Chickaloon is projected to be:

• Base Anchorage Construction Cost per sf.			$183
• Project Cost Factor:		@ 45%	$ 82
Medical Equipment	17%		
Construction Contingency	10%		
Design Fees	10%		
Construction Administration	8%		
• Multiplier for Village		@ 1.30	$ 80
Adjusted Cost per SF			$345
Projected Cost of a New Clinic:	**2000 sf. X $345**	**=**	**$690,000**

B. The cost of the Repair/Renovation and Additions for the existing Clinic are projected to be:

• Code & Condition Repairs/Renovations			
Cost from Deficiency Summary			$146,970
• Remodel/Upgrade work (See Def. Code 01)			
100% of clinic 534 SF = 534 SF @ $100/SF		$56,337	
• Additional Space Required by ARPCF – (See Def. Code 06)			
○ Base Anchorage Cost		$226	
Medical Equipment		$ 32	
Additional Costs –		$ 98	
General Requirements	20%		
Estimation Contingency	15%		
○ `Multiplier for Village	@1.30	$107	
Adjusted Cost per SF		$463	
Total Addition Cost of 1466 SF @ $463			$675,373
• Project Cost Factor:	@ 28%		$246,030
Construction Contingency	10%		
Construction Administration	8%		
Design Fees	10%		
Total cost of remodel/addition			**$1,124,710**

C. Comparison of Existing Clinic Renovation/Addition versus New Clinic:

Ratio of Renovation/Addition versus New Clinic is:
$1,124,710 / $690,000 = 1.63 x cost of New Clinic

Based on Denali Commission standard of evaluation; the remodel/addition costs are more than 75% of the cost of new construction. A new clinic is recommended for this community.

* Note: Village factors may have been adjusted for recent 2001 cost adjustments and may have changed from previously published data distributed to the villages.

D. Overall Project Cost Analysis:

The overall project cost analysis below incorporates land, multi-use, utility costs, and road access costs, and project management fees if any are associated with the project.

Item	Quantity	Units	Unit Cost	Area Adjustment Factor	Total Cost	Allowable under "Small" Clinic Process (yes/no)
Primary Care Clinic (Allowable)	2000	SF	$265.00	1.30	$690,000	yes
Clinic (Non-allowable portion)	0	SF	$265.64	1.7	$0	no
Land	15,000	SF	$2.00	1	$30,000	yes
Multi-Use Facility Design Cost	0	LS	$0.00	1	$0	yes
Multi-Use Facility Construction Cost	0	LS	$0.00	1	$0	no
Utility Extension/Improvements	1	LS	$15,000	1	$15,000	yes
Road access & parking lot improvements	1	LS	$5,000	1	$5,000	yes
Subtotal					$740,000	
Project Management Fees					Unknown	
Total Project Cost					**Unknown**	

VII. Conclusions and Recommendations

The existing Chickaloon Clinic is very small and just being completed as an ongoing model of health care for the community. Base on current ANTHC and Southcentral Foundation and Chickaloon Tribal Government delivery model for health care to rural Alaska, the facility is not adequate in size or in condition to meet these needs. The existing structure could be adapted for many other less clinical and medically stringent uses without extensive remodeling.

After careful review it is the recommendation of the consultant team that a new Denali Commission 2000 SF Medium Clinic be considered for Chickaloon. The addition of approximately 1466 sf of clinic space required by the current ARPCF Program Space Guidelines and the major renovation and upgrading of the existing clinic space will cost 1.63 times the cost of a new clinic. This results in the recommendation of a new clinic for this village.

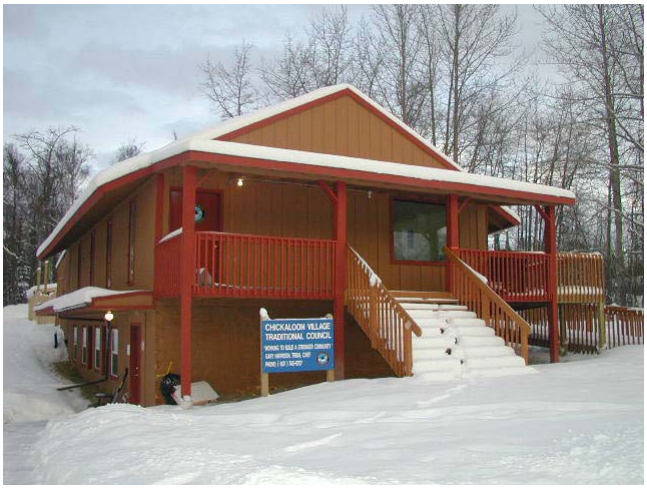
We reviewed the options with the local community leaders the consensus was that the New Medium Clinic would meet the current community needs and for years to come. In addition, they agreed that there is a site in process of acquisition for the new clinic. Utilities are available with well and on-site septic for the new facility.

The community believes this is a good solution and will produce the best return for funds invested in a clinic that meets the needs of Chickaloon Community and is aggressively moving to assist in any way to accomplish this goal.

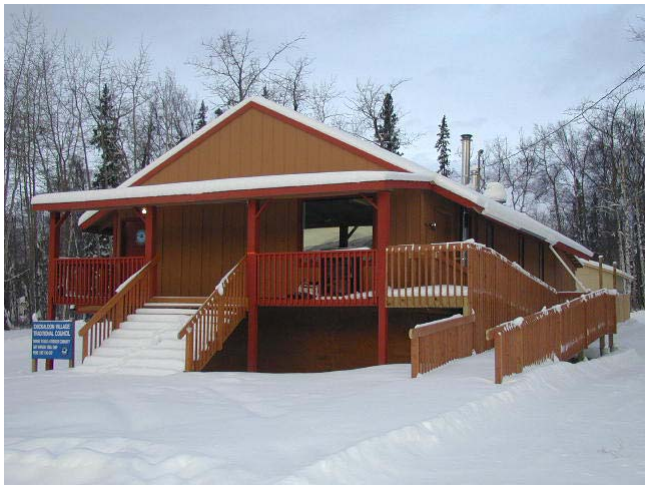
Appendix A: Specific Deficiencies Listings

The attached sheets represent the individual deficiencies identified for this project and the corrective action required to meet current codes and standards of construction. The deficiencies are further summarized in Section V. Summary of Existing Clinic Deficiencies.

Appendix B: General Site Photographs

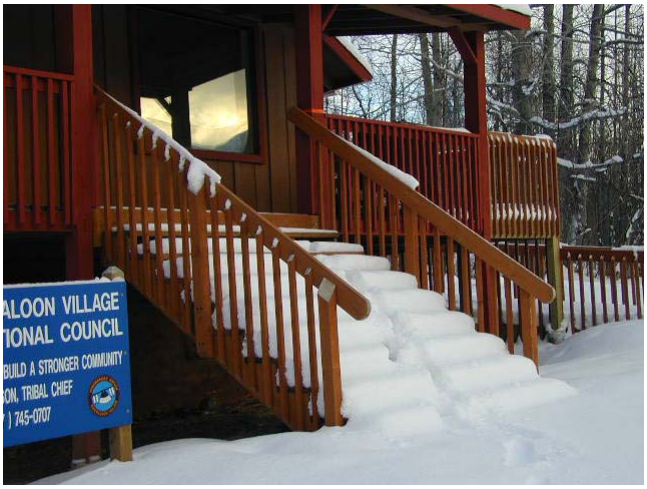


Southeast

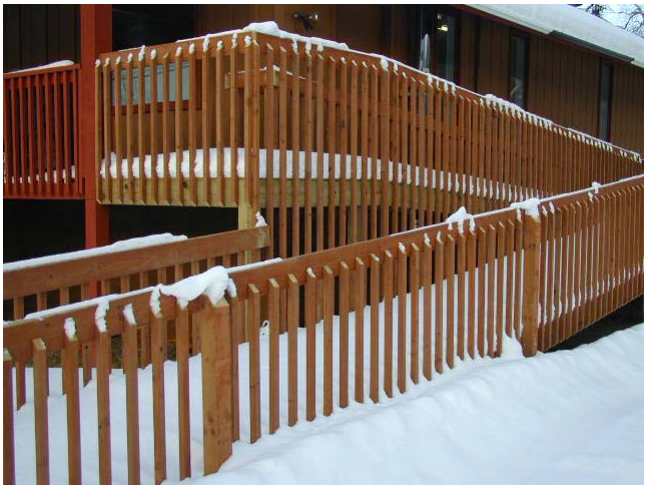


Northeast

Southwest



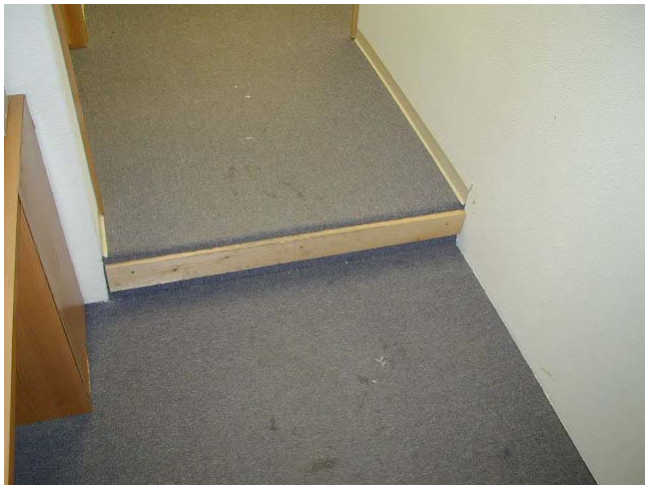
Front stairs to upper level



Ramp

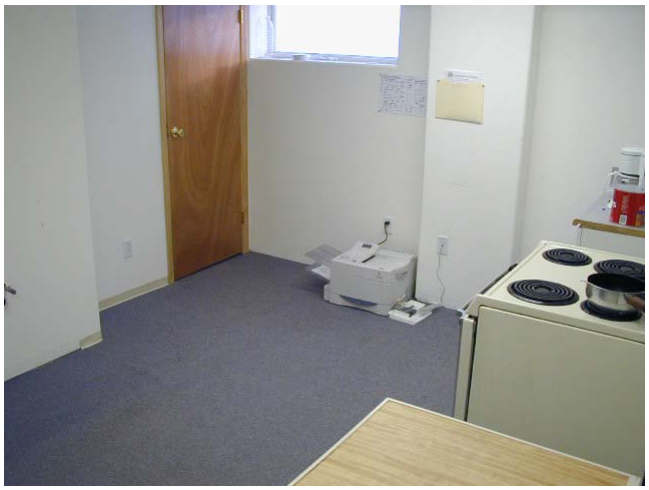
Front Entry to Clinic

Waiting and Reception



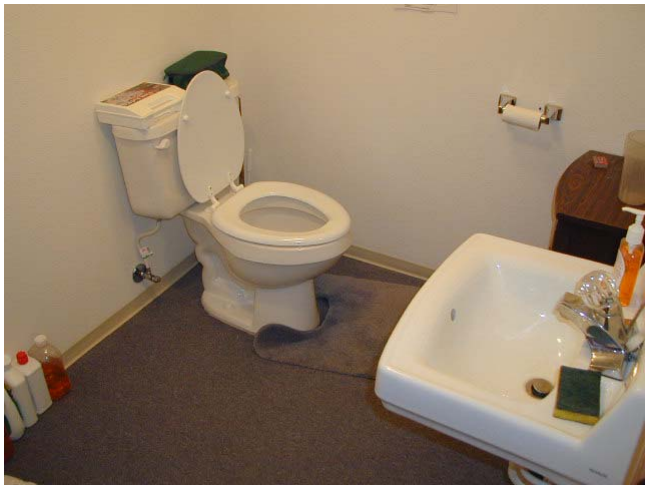
Step in Hallway

Hallway to back Exam room

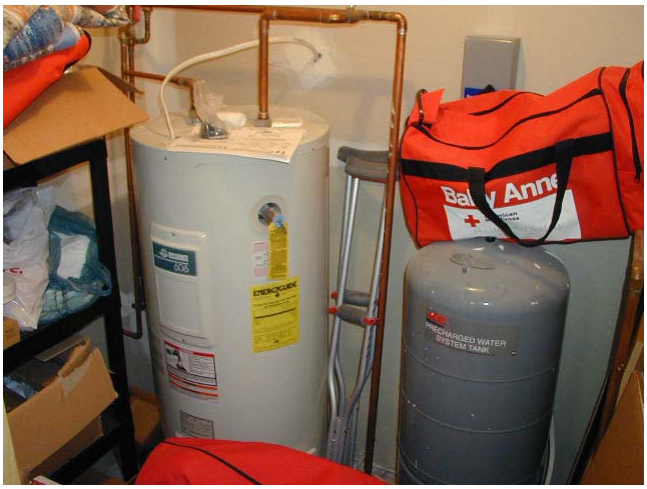


Future Exam area

Exam room under Constrution

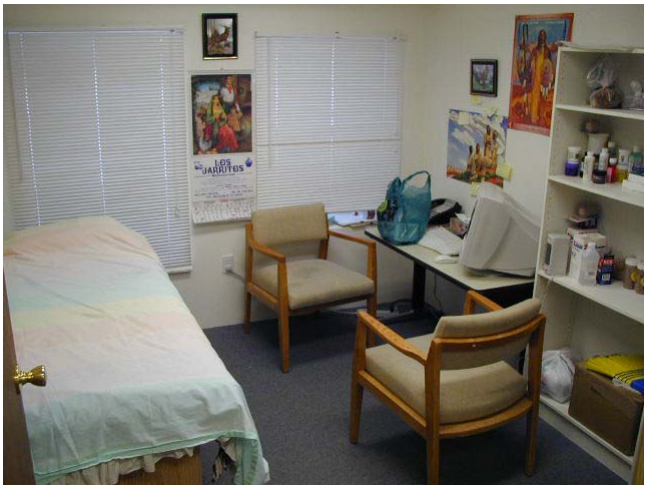


Shared Toilet room

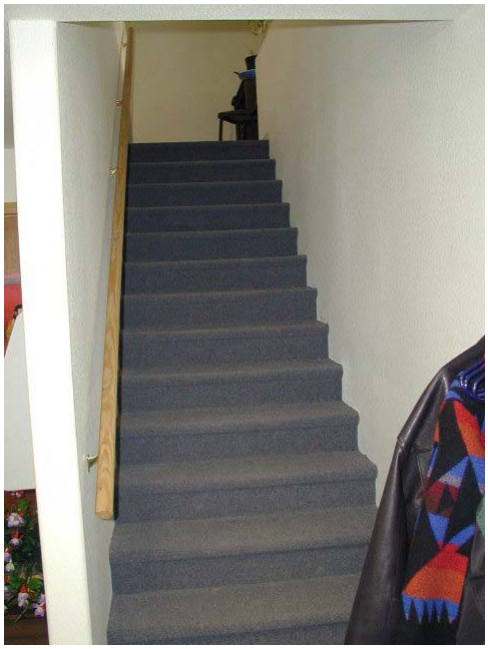


Supply Storage

Health Aids office

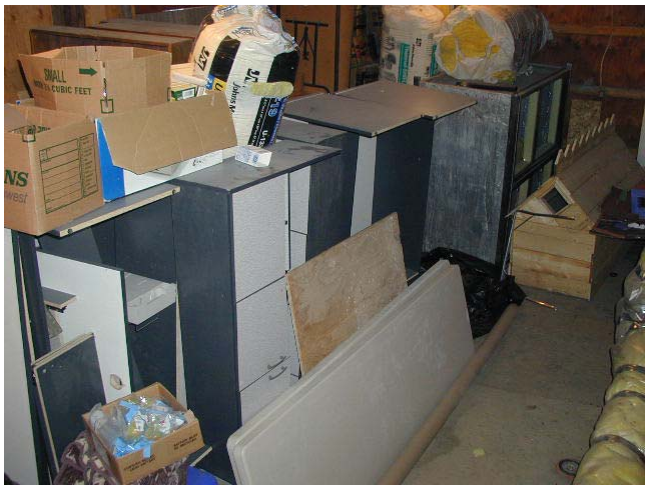


Traditional Healing Room

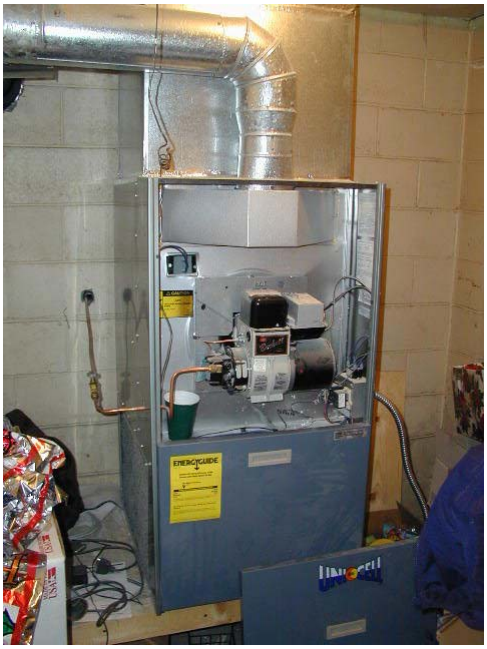


Stairs to upper level

Community Room above

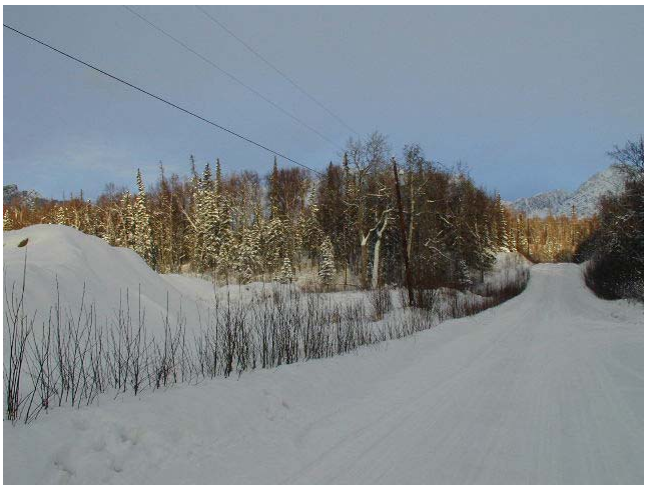


Storage behind Community Room

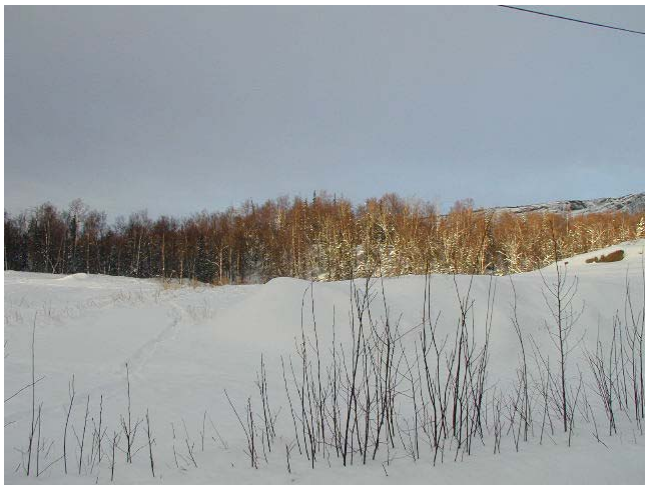


Mechanical Room

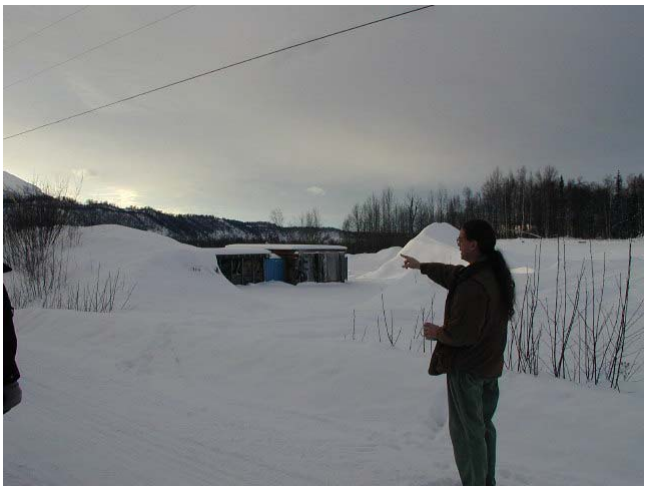
A beautiful Sunrise in Chickaloon



New Site looking West



New Site looking South



New Site looking Southeast

New Site looking Southwest

This Report was Prepared by

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